

REMARKS

With this Amendment, claims 1-77 are canceled without prejudice to later prosecution. Claims 78-83 are added and pending with entry of this Amendment.

The specification of the present application is identical to U.S. Patent Application No. 08/788,822, filed January 23, 1997, with two exceptions. First, the title of the present application is different than the title of U.S. Patent Application No. 08/788,822. Second, the present application claims priority, and incorporates by reference U.S. Patent Application No. 08/788,822.

Support for new claims 78-83 can be found in U.S. Patent Application No. 08/305,871, filed September 14, 1994, now U.S. Patent No. 5,736,142 ("the '142 patent"). The '142 patent is a parent application of, and is incorporated by reference by, the present application. All support is therefore provided with reference to the '142 patent.

For example, support for new claim 78 can be found on column 3, lines 1-19 of the '142 patent, which describes claimed pan DR peptides. In light of the fact that the pan DR peptides of the invention can be synthesized via recombinant DNA techniques (column 6, lines 54-65), it is clear that pan DR peptides need not include D-amino acids. *See, also*, column 10, lines 1-3 (stating that peptides of the invention "may generally comprise either L-amino acid or D-amino acids"). Indeed, claim 34 of the '142 patent is directed to pan DR peptides with the exact same amino acid sequences recited in claim 78 of the present application, with the exception that the sequences of claim 78 are limited to those embodiments where R₄ is tryptophan-threonine-leucine-lysine. Support for "a peptide of fewer than 30 amino acids can be found, e.g., on column 4, lines 5-6 of the '142 patent.

Support for claims 79 and 83 can be found, e.g., on column 9, lines 36-39, which states that L-amino acid-containing peptides can be capped with a D-amino acid.

Support for claim 80-82 can be found essentially the same place in the '142 patent as the support for claim 78. One difference between claims 80-82 and claim 78 is the nomenclature used to describe the claimed peptides. This nomenclature has been provided merely to facilitate examination and description of the claimed peptides and does not introduce new matter. The main advantage of this new nomenclature is that every amino acid is defined by its own variable (e.g., "X₁") whereas the variables used in claim 78 (e.g., R₁") often provide

for more than one amino acid residue. By providing one variable for each amino acid position of a peptide, it is significantly easier to determine the claimed subject matter. Thus, the new nomenclature does not represent new matter as it does not change the genus of peptides encompassed by the claim.

The peptides represented by claim 80 correspond to a subset of peptides claimed in claim 78. The following table provides a comparison between the peptides recited in claims 78 and 80.

Claim 80	Claim 78
X ₁ : A D- or L-amino acid	R ₁ : A D- or L-amino acid followed by
X ₂ : A or K	A or K
X ₃ : (X), Y or F, wherein (X) is cyclohexylalanine	R ₂ : (X), Y or F, wherein (X) is cyclohexylalanine
X ₄ : A, I, S or V	R ₃ : 3 or 4 amino acids selected from A, I, S, E or V
X ₅ : A, I, S or V	R ₄ : WTLK C ₆ H ₁₁ N ₂ O ₂ ALK 9 KT
X ₆ : A, I, S or V	
X ₇ : W	
X ₈ : T	
X ₉ : L	R ₅ : 2-4 amino acids selected from A, S or V followed by a D- or L-amino acid
X ₁₀ : K	
X ₁₁ : A, S or V	
X ₁₂ : A, S or V	
X ₁₃ : A D- or L-amino acid	

There are two substantive differences between the claims of claim 78 and claim 80. First, claim 78 provides that R₃ is 3 or 4 amino acids, whereas claim 80 corresponds to R₃ as 3 amino acids only. Second, claim 78 provides that R₅ is 2-4 amino acids whereas claim 80 provides two amino acids (i.e., X₁₁ and X₁₂). Thus, in each aspect, claim 80 includes one of the species provided in the Markush groups of claim 78.

The additional limitations provided in dependent claims 81-82 correspond to the same subject matter in the "R₅" position of claim 78, wherein R₅ is 3 or 4 amino acids, respectively.

In light of the above explanation, Applicants submit that no new matter is introduced by this amendment.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If a telephone conference would expedite prosecution of this application, please telephone the undersigned at 415-576-0200.

Respectfully submitted,



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